TRANSMITTAL MEMORANDUM FOR SCREENING SITE INSPECTION

Date: August 22, 1990
CERCLIS Site Name: Johnson Controls. Inc. - Teutonia
US EPA WID # 000808857

HRS 1 PRELIMINARY AND PROJECTED SCORES

PRELIMINARY HRS SCORE BASED ON THE SCREENING SITE INSPECTION (SSI)
(This score is based on information from the screening site inspection.)

Surface Water 0.00 Groundwater 0.00 Air 0.00 Total 0.00

PROJECTED HRS SCORE FOR A LISTING SITE INSPECTION (LSI)
(This score is based on the expected acquisition of information from the listing site inspection.)

Surface Water 2.52 Groundwater 29.83 Air 0.00 Total 17.30

IMMEDIATE ACTION

We have evaluated this site for the need for immediate action as a result of a substantial threat to either human health or the environment.

_____ The site does present a threat which requires immediate removal action.

__X__ The site does not present a threat which requires immediate removal action.

US EPA RECORDS CENTER REGION 5
551585

RECOMMENDATIONS

Based on HRS related information and evaluation of the immediate removal threat, the Wisconsin Department of Natural Resources concludes from its activities the following:

1._____The HRS 1 scores are below 25.00 and therefore the site should be designated as a NFRAP site.

2._____The HRS 1 scores are equal to or exceed 25.00, however due to extenuating circumstances (ie. ongoing clean-up) the site should not be designated as a candidate for LSI activities.

3._____The HRS 1 scores are equal to or exceed 25.00. As a result, we recommend that the site be designated as a potential LSI candidate. The WDNR will include this site with the other LSI candidate sites when priority (to EPA) sites for LSI activities. The Wisconsin Department of Natural Resources anticipates that the following activities would be required during the LSI in order to establish a sufficient data base to successfully list the facility on the NPL.

_____ groundwater characterization
_____ air sampling
_____ further sampling of surface water
_____ further characterization of waste
_____ more extensive sampling of residential and municipal wells
_____ collect additional soil and/or stream sediment samples
_____ conduct area survey
_____ other:

4.__XX__The HRS 1 Scores are below 25.00, yet The Department believes that the site should be recommended for an ESI. The ESI should further characterize surface soil contamination and evaluate the site under the revised scoring system, emphasizing the Direct Contact exposure route.

The Wisconsin Department of Natural Resources would like to make the following additional comments about the site:

1. The surface soils on site show an observed release of chromium. The current scoring system does not score the Direct Contact route. WDNR feels that further investigation is warranted to address the contaminated soils for this site when the Revised HRS is Promulgated.

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HRS Summary Score

Ground Water

Observed Release =	0	
Depth to Aquifer =	2	
Precipitation =	1	
Permeability =	1	
Physical State =	0	
Total Route Score =	6	
Container =	0	
Toxicity and Persistence =	18	
Hazardous Waste Quantity =	0	
Total Waste Score =	18	
Ground Water Use =	3	
Distance to Well/Population =	0	
Total Targets =	3	
Total Score =		0.00
Total Ground Water Score =	0.00	

Press any key to continue.

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HRS Summary Score, (cont.)

Surface Water

Observed Release =	0	
Site and intervening slope =	0	
Precipitation =	2	
Distance to Surface Water =	2	
Physical State =	0	
Total Route Score =	6	
Containers =	0	
Toxicity/Persistence =	18	
Toxic Waste Quantity =	0	
Total Waste Score =	18	
Surface Water use =	9	
Dist. to Sensitive Environment =	0	
Distance/Population =	0	
Total Targets =	9	
Total Score =		0.00
Surface Water Route Score =	0.00	

Press any key to continue.

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HRS Summary Score, (cont.)

Air Route

Observed Release =	0	
Reactivity/Incompatability =	0	
Toxicity =	0	
Hazardous Waste Quantity =	0	
Distance/Population =	30	
Distance to Sensitive Environment =	0	
Land Use =	3	
Total Waste Score =	0	
Total Targe Score =	33	
Total Score =		0.00
Total Air Score =	0.00	
Total HRS score =		0.00

Press any key to continue.

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PRO Summary Score

Ground Water

*Observed Release =	45
*Depth to Aquifer =	2
Precipitation =	1
Permeability =	1
*Physical State =	3
Total Route Score =	9
*Container =	1
Toxicity and Persistence =	18
*Hazardous Waste Quantity =	2
Total Waste Score =	20
Ground Water Use =	3
*Distance to Well/Population =	16
Total Targets =	19
Total Score =	17100.00
Total Ground Water Score =	29.83

Press any key to continue.

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PRO Summary Score, (cont.)

Surface Water

*Observed Release =	0
*Site and intervening slope =	0
Precipitation =	2
Distance to Surface Water =	5
*Physical State =	3
Total Route Score =	1
*Containers =	1
Toxicity/Persistence =	18
*Toxic Waste Quantity =	2
Total Waste Score =	20
Surface Water use =	9
*Dist. to Sensitive Environment =	0
Distance/Population =	0
Total Targets =	9
Total Score =	1620,00

Surface Water Route Score = 2.52

Press any key to continue.

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PRO Summary Score, (cont.)

Air Route

*Observed Release =	0	
*Reactivity/Incompatability =	1	
*Toxicity =	9	
*Hazardous Waste Quantity =	2	
Distance/Population =	30	
*Distance to Sensitive Environment =	0	
Land Use =	3	
Total Waste Score =	12	
Total Targe Score =	33	
Total Score =		0.00
Total Air Score =	0.00	
Total PRO score =		17.30

Press any key to continue.

File Name : A:\TEUTONIA

HRS Ground Water Route Work Sheet

Rating Factor	Assigned Value	Multiplier	Score	Max. Score	Ref. Section
[1] Observed Release	0 45	1	0	45	3.1
If observed release is given a score of 45, proceed to line [4]. If observed release is given a score of 0, proceed to line [2].					
[2] Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 3	2	4	6	
Net Precipitation	0 1 2 3	1	1	3	
Permeability of the Unsaturated Zone	0 1 2 3	1	1	3	
Physical State	0 1 2 3	1	0	3	
Total Route Characteristics score			6	15	
[3] Containment	0 1 2 3	1	0	3	3.3
[4] Waste Characteristics					3.4
Toxicicty/Persistence	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	0	8	
Total Waste Characteristics score			18	26	
[5] Targets					3.5
Ground Water Use	0 1 2 3	3	3	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets score			3	49	
[6] If line [1] is 45, multiply [1] X [4] X [5] If line [1] is 0, multiply [2] X [3] X [4] X [5]			0.0E	57,330	
[7] Divide line [6] by 57,330 and multiply by 100		S =	0.00		

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HRS Surface Water Route Work Sheet

Rating Factor	Assigned Value	Multiplier	Score	Max. Score	Ref. Section
[1] Observed Release	0 45	1	0	45	4.1
If observed release is given a score of 45, proceed to line [4]. If observed release is given a score of 0, proceed to line [2].					
[2] Route Characteristics					
Facility Slope and Intervening Terrain	0 1 2 3	1	0	3	4.2
1-yr. 24 hr. Rainfall	0 1 2 3	1	2	3	
Distance to Nearest Surface Water	0 1 2 3	2	2	6	
Physical State	0 1 2 3	1	0	3	
Total Route Characteristics score			6	15	
[3] Containment	0 1 2 3	1	0	3	4.3
[4] Waste Characteristics					4.4
Toxicicty/Persistence	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	0	8	
Total Waste Characteristics score			18	26	
[5] Targets					4.5
Surface Water Use	0 1 2 3	3	9	9	
Distance to Sensitive Environment	0 1 2 3	2	0	6	
Distance to Water Intake Downstream	12 16 18 20 24 30 32 35 40		0		
Total Targets score			9	55	
[6] If line [1] is 45, multiply [1] X [4] X [5] If line [1] is 0, multiply [2] X [3] X [4] X [5]			0.0E	64,350	
[7] Divide line [6] by 64,350 and multiply by 100			S =	0.00	

File Name : A:\TEUTONIA

HRS Air Route Work Sheet

Rating Factor	Assigned Value	Multiplier	Score	Max. Score	Ref. Section
[1] Observed Release	0 45	1	0	45	5.1
Date and Location: Sampling Protocol:					
If line [1] is 0, the S a = 0, Enter on line [5] If line [1] is 45, then proceed to line [2]					
[2] Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Route Characteristics score				20	
[3] Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
Total Targets Score				39	
[4] Multiply [1] X [2] X [3]				35,100	
[5] Divide line [4] by 35,100 and multiply by 100		S a =			0

File Name : A:\TEUTONIA

PRO Ground Water Route Work Sheet

Rating Factor	Assigned Value	Multiplier	Score	Max. Score	Ref. Section
[1] Observed Release	0 45	1	45*	45	3.1
If observed release is given a score of 45, proceed to line [4]. If observed release is given a score of 0, proceed to line [2].					
[2] Route Characteristics					
Depth to Aquifer of Concern	0 1 2 3	2	4*	6	3.2
Net Precipitation	0 1 2 3	1	1	3	
Permeability of the Unsaturated Zone	0 1 2 3	1	1	3	
Physical State	0 1 2 3	1	3*	3	
Total Route Characteristics score			9	15	
[3] Containment	0 1 2 3	1	1*	3	3.3
[4] Waste Characteristics					3.4
Toxicicty/Persistence	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	2*	8	
Total Waste Characteristics score			20	26	
[5] Targets					3.5
Ground Water Use	0 1 2 3	3	3	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	16*	40	
Total Targets score			19	49	
[6] If line [1] is 45, multiply [1] X [4] X [5] If line [1] is 0, multiply [2] X [3] X [4] X [5]			1.7E	57,330	
[7] Divide line [6] by 57,330 and multiply by 100		S	= 29.83		

A '*' represents a data gap between the Pre and the Pro

File Name : A:\teutonia

PRO Surface Water Route Work Sheet

Rating Factor	Assigned Value	Multiplier	Score	Max. Score	Ref. Section
[1] Observed Release	0 45	1	0*	45	4.1
If observed release is given a score of 45, proceed to line [4]. If observed release is given a score of 0, proceed to line [2].					
[2] Route Characteristics					
Facility Slope and Intervening Terrain	0 1 2 3	1	0*	3	4.2
1-yr. 24 hr. Rainfall	0 1 2 3	1	2	3	
Distance to Nearest Surface Water	0 1 2 3	2	2	6	
Physical State	0 1 2 3	1	3*	3	
Total Route Characteristics score			9	15	
[3] Containment	0 1 2 3	1	1*	3	4.3
[4] Waste Characteristics					4.4
Toxicicty/Persistence	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	2*	8	
Total Waste Characteristics score			20	26	
[5] Targets					4.5
Surface Water Use	0 1 2 3	3	9	9	
Distance to Sensitive Environment	0 1 2 3	2	0*	6	
Distance to Water Intake Downstream	12 16 18 20 24 30 32 35 40		0		
Total Targets score			9	55	
[6] If line [1] is 45, multiply [1] X [4] X [5] If line [1] is 0, multiply [2] X [3] X [4] X [5]			1.6E	64,350	
[7] Divide line [6] by 64,350 and multiply by 100		S =	2.52		

A '*' represents a data gap between the Pre and the Pro

File Name : A:\TEUTONIA

PRO Air Route Work Sheet

Rating Factor	Assigned Value	Multiplier	Score	Max. Score	Ref. Section
[1] Observed Release	0 45	1	0*	45	5.1
Date and Location: Sampling Protocol:					
If line [1] is 0, the S a = 0, Enter on line [5] If line [1] is 45, then proceed to line [2]					
[2] Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Route Characteristics score				20	
[3] Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
Total Targets Score				39	
[4] Multiply [1] X [2] X [3]				35,100	
[5] Divide line [4] by 35,100 and multiply by 100		S a =			0

A '*' represents a data gap

File Name : A:\Teutonia

Ground Water Route (HRS)

1. Observed Release

Contaminants Detected:

UNKNOWN

Rationale for attributing the contaminants to the facility:

Reference no.

2. Route Characteristics

Depths to Aquifer of Concern:

Depth from the ground surface to the highest seasonal level of the saturated zone [Water table] of the aquifer of concern:

30.00

Reference no.7

Depth from the ground surface to the lowest point of waste disposal/storage:

UNKNOWN

Reference no.

Net Precipitation:

Mean annual or seasonal precipitation (list Months for seasonal):

28.00

Reference no.8

Mean annual lake or seasonal evaporation (list months for seasonal):

28.50

Reference no.8

Net Precipitation:

-0.50

Permeability of Unsaturated Zone:

Soil type in unsaturated zone:

Silt, loams, silty clays, silty loams, clay loams; less permeable limestones, dolomites, and sandstone; moderately permeable till.

Reference no.7,8

Physical state of substances at time of disposal (or at present time for generated gasses):

UNKNOWN

Reference no.

3. Containment

Method of waste or leachate containment evaluated:

UNKNOWN

Reference no.

4. Waste Characteristics

Toxicity and Persistence:

Toxicity level of evaluated compounds:

Sax Level 3 or NFPA Level 3 or 4

Reference no.6,8

Persistence of evaluated compounds:

Metals, polycyclic compounds and halogenated hydrocarbons.

Reference no.6,8

Hazardous Waste Quantitiy:

Tons/Cubic Yards No. of Drums

UNKNOWN

Reference no.

5. Targets

Ground Water Use:

Commercial, industrial or irrigation and another water source presently available; not used, but usable.

Reference no.4,5

Distance to nearest well:

UNKNOWN

Reference no.

Population served by Ground Water wells in the aquifer of concern:

UNKNOWN

Reference no.

File Name : A:\Teutonia

Surface Water Route (HRS)

1. Observed Release

Contaminants Detected:

UNKNOWN

Reference no.

2. Route Characteristics

Facility Slope:

Average Slope of facility in percent:

UNKNOWN

Reference no.

Average slope of terrain between facility and closest surface water body in percent:

UNKNOWN

Reference no.

1 - year, 24 - hour rainfall:

2.25 Inches.

Reference no.8

Distance to Nearest Downslope Surface Water:

1000 feet to 1 mile

Reference no.3

Physical State of Waste:

UNKNOWN

Reference no.

3. Containment

Method of waste or leachate containment evaluated:

UNKNOWN

Reference no.

4. Waste Characteristics

Toxicity and Persistence:

Toxicity level of evaluated compounds:

Sax Level 3 or NFPA Level 3 or 4

Reference no.6,8

Persistence of evaluated compounds:

Metals, polycyclic compounds and halogenated hydrocarbons.

Reference no.6,8

Hazardous Waste Quantitiy:

Tons/Cubic Yards	No. of Drums
UNKNOWN	

Reference no.

5. Targets

Surface Water Use:

Drinking water.

Reference no.5

Distance to Sensitive Environment:

Coastal Wetlands	Fresh Water Wetlands	Critical Habitat
	UNKNOWN	

Reference no.

Distance to Surface Water Intake:

> 3 miles

Reference no.5,12

Population served by Surface Water intake within ~~three~~ 4 miles of contamination route:

> 10,000

Reference no.5,11

File Name : A:\Teutonia

Air Route (HRS)

1. Observed Release

Contaminants Detected:

Rationale for attributing the contaminats to the facility:

UNKNOWN

Reference no.

2. Waste Characteristics

Reactivity and Incompatability:

Most Reactive Compound:

UNKNOWN

Reference no.

Toxicity:

UNKNOWN

Reference no.

Hazardous Waste Quantity:

Tons/Cubic Yards No. of Drums

UNKNOWN

Reference no.

3. Targets

Population Within 4-Mile Radius

> 10,000

Reference no. 5,11

Distance to Population:

0- 1/4 mile

Reference no. 3,6

Distance to Sensitive Environment:

Coastal Wetlands	Fresh Water Wetlands	Critical Habitat
UNKNOWN		

Reference no.

Land Use:

Commer/indust	Nat/st.parks.Res.	Ag land	Prime*	Landmark
< 1/4 mile	< 1/4 mile	1/4 mile	1/2 mile	in view

Reference no. 6

File Name : A:\Teutonia

Ground Water Route (PRO)

1. Observed Release

Contaminants Detected:

Rationale for attributing the contaminants to the facility:

Reference no.6,7

2. Route Characteristics

Depths to Aquifer of Concern:

Depth from the ground surface to the highest seasonal level of the saturated zone [Water table] of the aquifer of concern:

30.00

Reference no.7

Depth from the ground surface to the lowest point of waste disposal/storage:

5.00

Reference no.2,6,7

Net Precipitation:

Mean annual or seasonal precipitation (list Months for seasonal):

28.00

Reference no.8

Mean annual lake or seasonal evaporation (list months for seasonal):

28.50

Reference no.8

Net Precipitation:

-0.50

Permeability of Unsaturated Zone:

Soil type in unsaturated zone:

Silt, loams, silty clays, silty loams,

clay loams; less permeable limestones, dolomites, and sandstone; moderately permeable till.

Reference no.7,8

Physical state of substances at time of disposal (or at present time for generated gasses):

Liquid, Sludge or Gas.

Reference no.6,9

3. Containment

Method of waste or leachate containment evaluated:

Method with the highest score:

Containers

Containers sealed and in sound condition, no liner or moderately permeable liner.

Reference no.6,10

4. Waste Characteristics

Toxicity and Persistence:

Toxicity level of evaluated compounds:

Sax Level 3 or NFPA Level 3 or 4

Reference no.6,8

Persistence of evaluated compounds:

Metals, polycyclic compounds and halogenated hydrocarbons.

Reference no.6,8

Hazardous Waste Quantitiy:

Tons/Cubic Yards	No. of Drums
11-62	41-250

Reference no.9

5. Targets

Ground Water Use:

Commercial, industrial or irrigation and another

water source presently available; not used, but usable.

Reference no.4,5

Distance to nearest well:

2001 feet to 1 mile

Reference no.4

Population served by Ground Water wells in the aquifer of concern:

101 - 1,000

Reference no.4,11

File Name : A:\Teutonia

Surface Water Route (PRO)

1. Observed Release

Contaminants Detected:

Reference no.3,6

2. Route Characteristics

Facility Slope:

Average Slope of facility in percent:

Facility has average slope < or = 3%

Reference no.3,6

Average slope of terrain between facility and closest surface water body in percent:

Closed basin or average slope of < or = 3%

Reference no.3,6

1 - year, 24 - hour rainfall:

2.25 Inches.

Reference no.8

Distance to Nearest Downslope Surface Water:

1000 feet to 1 mile

Reference no.3

Physical State of Waste:

Liquid, Sludge or Gas.

Reference no.9

3. Containment 6,

Method of waste or leachate containment evaluated:

Method with the highest score:

Containers

Containers sealed and in sound condition, but not surrounded by sound diversion or containment structures.

Reference no. 6, 10

4. Waste Characteristics

Toxicity and Persistence:

Toxicity level of evaluated compounds:

Sax Level 3 or NFPA Level 3 or 4

Reference no.6,8

Persistence of evaluated compounds:

Metals, polycyclic compounds and halogenated hydrocarbons.

Reference no.6,8

Hazardous Waste Quantitiy:

Tons/Cubic Yards	No. of Drums
11-62	41-250

Reference no.9

5. Targets

Surface Water Use:

Drinking water.

Reference no.5

Distance to Sensitive Environment:

Coastal Wetlands	Fresh Water Wetlands	Critical Habitat

> 2 miles > 1 mile > 1 mile

Reference no.3

Distance to Surface Water Intake:

> 3 miles

Reference no.5,12

Population served by Surface Water intake within ~~three~~ 4 miles of contamination route:

> 10,000

Reference no.5,11

File Name : A:\Teutonia

Air Route (PRO)

1. Observed Release

Contaminants Detected:

Rationale for attributing the contaminats to the facility:

Reference no. 6

2. Waste Characteristics

Reactivity and Incompatability:

Most Reactive Compound:

No Incompatible substances are present

Reference no. 8

Toxicity:

Sax Level 3 or NFPA Level 3 or 4

Reference no. 6

Hazardous Waste Quantity:

Tons/Cubic Yards 11-62 No. of Drums 41-250

Reference no. 9

3. Targets

Population Within 4-Mile Radius

> 10,000

Reference no. 5,11

Distance to Population:

0-1/4 mile

Reference no. 3,6

Distance to Sensitive Environment:

Coastal Wetlands	Fresh Water Wetlands	Critical Habitat
> 2 miles	> 1 mile	> 1 mile

Reference no. 3

Land Use:

Commer/indust	Nat/st.parks.Res.	Ag land	Prime*	Landmark
< 1/4 mile	< 1/4 mile	1/4 mile	1/2 mile	in view

Reference no. 6